

ABSTRACT

A system and method of composing a query object for application against a database is provided. The method composes a selection clause for the query. Next, a criteria clause for the query is generated, with the criteria clause comprising input criteria related to the query, additional criteria specified against the query, and generated criteria based on a joint relationship. Next a source clause utilizing elements in the database accessed by the query is generated. A database traversal system and method is provided. The method identifies all tables directly accessible by each table and creates a data structure comprising an entry for each table. The entry comprises an identification field for each table and a link field identifying all tables directly accessible by each table. The data structure is traversed and an optimum path of the traversal paths utilizing data obtained from traversing the data structure is identified.